# Tech Info Library

## **Communications Interface Card: Echo Suppression (11/96)**

Revised: 11/21/96 Security: Everyone

Communications Interface Card: Echo Suppression (11/96)

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TOPIC -----

The Communications Interface allows a BASIC program to communicate with another computer. Normally, the information coming in from the other computer will be displayed on the screen, which is not always desirable. The two routines below will disable the echo feature but you must decide which best fits your program.

DISCUSSION ------

#### Machine Language

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First determine which slot the interface card is in before typing in the software patch. The patch is customized for this slot number and will not work if used with a different configuration. Enter the patch using the values from the table for words in brackets, < >.

3 7 1 2 4 5 6 SLOT STAT FE9E ΑE BECE DEEEDATA 9F ΑF BFCF DF EF FF

Enter the monitor with CALL -155 and type

3A0:A9 03

3A2:8D <STAT> C0

3A5:A9 11

3A7:8D <STAT> C0

3AA:A9 B5

3AC:85 38

3AE:A9 03

3B0:85 39

3B2:4C EA 03

```
3B5:91 28
3B7:AD <STAT> C0
3BA:10 FB
```

3BC:AD <DATA> C0

3BF:09 80 3C1:60

3C2:00 00 00 00 00

To check your typing, type "3AOL", and compare your listing to the one for slot 2 shown below.

03A0-	Α9	03		LDA	#\$03
03A2-	8D	ΑE	C0	STA	\$C0AE
03A5-	Α9	11		LDA	#\$11
03A7-	8D	ΑE	C0	STA	\$C0AE
03AA-	Α9	В5		LDA	#\$B5
03AC-	85	38		STA	\$38
03AE-	Α9	03		LDA	#\$03
03B0-	85	39		STA	\$39
03B2-	4C	EΑ	03	JMP	\$03EA
03B5-	91	28		STA	(\$28),Y
03B7-	AD	ΑE	C0	LDA	\$C0AE
03BA-	10	FB		BPL	\$03B7
03BC-	AD	AF	C0	LDA	\$C0AF
03BF-	09	80		ORA	#\$80
03C1-	60			RTS	
03C2-	00			BRK	
03C3-	00			BRK	
03C4-	00			BRK	
03C5-	00			BRK	
03C6-	00			BRK	

Now return to BASIC by typing 3D0G

Save the patch to disk BSAVE PATCH, A\$3A0, L\$21:

#### Using the patch

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The first time you use the interface you must load the patch into memory and initialize the interface. This can be done from a BASIC program by adding the following lines.

```
100 PRINT D$; "BLOAD PATCH": CALL 928 (loads patch and turns off echo)
200 PRINT D$;"IN#0"
                                      (will re-enable the Apple keyboard)
300 CALL 938
                                      (reconnects the interface)
```

#### Video Echo

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The video echo can be stopped by fooling the interface into thinking it is in full duplex terminal mode, as running the following BASIC program demonstrates.

```
10 \text{ SLOT} = 2
```

- 20 PRINT CHR\$(4); "PR# SLOT"
- 30 PRINT
- 40 POKE 1912 + SLOT,145
- 50 PRINT "THIS WON'T ECHO"
- 60 POKE 1912 + SLOT,11
- 70 PRINT "THIS WILL ECHO"
- 90 PRINT CHR\$(4); "PR# 0"

### Article Change History:

18 Nov 1996 - Reviewed for technical accuracy, revised formatting.

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